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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/570,130	03/01/2006	Tsutomu Aita	0649-1231PUS1	7437

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EXAMINER	
HUYNH, ANDY	

ART UNIT	PAPER NUMBER
2818	

NOTIFICATION DATE	DELIVERY MODE
02/11/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/570,130	AITA ET AL.	
	Examiner	Art Unit	
	ANDY HUYNH	2818	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 December 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *5-20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 March 2006* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *03/01/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

This is responsive to Applicants' Reply to Election of Species Requirement filed December 29, 2008. In view of the Reply, Applicants have elected without traverse the invention of Group I, Species I, Claims **1-4**, for examination is acknowledged. Accordingly, Claims **5-20** are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 35 § 1.142(b) and MPEP § 821.03. Applicants have the right to file a divisional application covering the subject matter of the non-elected Claims **5-20**.

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d) based on an application filed in JAPAN, 2004-192774 on 06/30/2004, and 2005-166927 on 06/07/2005.

Information Disclosure Statement

This office acknowledges receipt of the following items from the applicant: Information Disclosure Statement(s) (IDS(s)) filed on 03/01/2006 and made of record. The references cited on the PTOL 1449 form have been considered.

Specification

The disclosure is objected to because of the following informalities:

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. It is noted that the claims are drawn to a device.

The specification has been checked to the extent necessary to determine the presence of all possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Drawings

The drawings are objected for the following reason.

Figures 10A-12I should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims **1 and 4** are rejected under 35 U.S.C. 102(b) as being anticipated by JP 2004-55669, Applicants' submitted prior art (ASPA).

Regarding Claim **1**, JP 2004-55669 discloses in Fig. 4 and related texts as set forth in Abstract, paragraphs 0026-0046, a solid image pick-up element comprising:

a photoelectric converting portion/a photodiode 2;

a charge transmitting portion/a valid imaging region 1A comprising a charge transmitting/transfer electrode 3 that transmits a charge generated by the photoelectric converting portion/the photodiode 2 (see Note); and

a peripheral circuit portion/an non-imaging region 1B connected to the charge transmitting portion/the valid imaging region 1A,

wherein a surface level of a field oxide film 4 provided at the peripheral circuit portion/the non-imaging region 1B and the charge transmitting portion/the valid imaging region 1A to surround an effective image pick-up region of the photoelectric converting portion/the photodiode 2 is to a degree the same as a surface level of the photoelectric converting portion/the photodiode 2 (as seen from Fig. 4).

Note: The recitation "that transmits a charge generated by the photoelectric converting portion" refers to an functional limitation and any such limitation must distinguish from the prior art in terms of structure rather than function, In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997); See also In re Swinehart, 439 F.2d210, 212-13, 169 USPQ 226,228-29 (CCPA 1971). Claims directed to apparatus must be distinguished from the

prior art in terms of structure rather than function. In re Danly, 263 F. 2d 844,847, 120 USPQ 528, 531 (CCPA 1959). "Apparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F. 2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990).

Regarding Claim **4**, JP 2004-55669 discloses wherein the field oxide film 4 is a film formed by selective oxidation (LOCOS) (see par. 0046). However, the limitation "the field oxide film is a film formed by selective oxidation (LOCOS)" is taken to be a product by process limitation and consider non-limitation. In a product-by-process claim, it is the patentability of the claimed product and not of the recited process steps which must be established. Therefore, when the prior art discloses a product which reasonably appears to be identical with or only slightly different than the product claimed in a product-by process claim, a rejection based on sections 102 or 103 is fair. The Patent Office is not equipped to manufacture products by a myriad of processes put before it and then obtain prior art product and make physical comparisons therewith. In re Brown, 173 USPQ 685 (CCPA 1972). Also, a product by process claim directed to the product per se, no matter how actually made, In re Hirao, 190 USPQ I S at 17 (footnote 3). See In re Fessman, 180 USPQ 324, 326 (CCPA 1974); In re Marosi et al., 218 USPQ 289, 292 (Fed. Cir. 1983); and particularly In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985), all of which make it clear that it is the patentability of the final structure of the product "gleaned" from the process steps, which must be determined in a " product by process" claim, and not the patentability of the process. See also MPEP 2113. Moreover, an old and obvious product produced by a new method is not a patentable product, whether claimed in "product by process" claims or not.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims **2 and 3** are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2004-55669, in view of JP 2003-332554, Applicants' submitted prior arts (ASPAs).

JP 2004-55669 does not explicitly disclose the following limitations. JP 2003-332554 discloses in Fig. 1 a solid image pick-up element wherein the charge transmitting/transfer electrode has a single layer electrode structure comprising a first electrode 4a and a second

electrode 4b formed via an insulting film 3/3a between electrodes 4a/4b covering a side wall of the first electrode 4a, the first electrode 4a comprises a first layer conductive film/polycrystalline silicon film, and the second electrode 4b comprises a second layer conductive film/tungsten silicide film (Abstract, pars. 0018-0026). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to utilize the teachings of a solid image pick-up element wherein the charge transmitting/transfer electrode has a single layer electrode structure comprising a first electrode 4a and a second electrode 4b formed via an insulting film 3/3a between electrodes 4a/4b covering a side wall of the first electrode 4a, wherein the first electrode 4a comprises a first layer conductive film/polycrystalline silicon film, and the second electrode 4b comprises a second layer conductive film/tungsten silicide film as taught by JP 2003-332554 and provide in the solid image pick-up element of JP 2004-55669 to arrive the claimed features in order to achieve a high-performance solid image pick-up device by which the deterioration of an insulating film on the surface of a semiconductor substrate can be prevented (Abstract).

Conclusion

A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the day of this letter. Failure to respond within the period for response will cause the application to become abandoned (see M.P.E.P 710.02(b)).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy Huynh, (571) 272-1781. The examiner can normally be

reached on Monday-Friday from 6:30 AM to 3:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Loke can be reached on (571) 272-1657. The Fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the -status of this application or proceeding should be directed to the receptionist whose phone number is (703) 308-0956.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Andy Huynh/
Primary Examiner, Art Unit 2818